



Appl. No. 10/720,919

Amdt. dated April 1, 2009

Reply to Office action of November 17, 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PRIMARY EXAMINER

Appl. No. : 10/720,919
Applicant : Finn Aagaard
Filed : November 24, 2003
Title : APPARATUS AND METHOD FOR IRRIGATING
CONTAINER-GROWN PLANTS

TC/A.U. : 3644
Examiner : Francis T. Palo

Docket No. : Y3.0074

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. 1.132

I, Thomas Halat hereby declare that:

1. I am more than twenty-one (21) years of age and reside in Illinois.

2. I am president of a company which raises and sells fresh vegetables and ornamental plants to the consuming public and have been involved with Tom's Vegetable Market for at least twenty years.

3. I have at least three locations for the referenced business.

4. I am familiar with the EBB FLO system cited by the Examiner in the above referenced application and the apparatus of the above referenced application, and consider their structures to be substantially different.

For a number of years my facilities used the EBB FLO

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device cited by the Examiner as prior art. This device was very successful in our production greenhouses due to the ability to water the plants from below, thereby wetting only the root ball, without getting the foliage wet, thus greatly reducing the incidence of disease. The system also automated the required irrigation system, thereby reducing labor time and cost. Also since the system of this application permitted reclamation of water and fertilizer, the environmental impact was greatly reduced.

These advantages are also desired for the retail greenhouses. However the retail greenhouses have concrete floors which prevent installation of the system of prior art therein.

The system disclosed and claimed in the referenced application solved this problem by placing the plumbing overhead, and filling and draining through one flexible connection, thereby providing filling pressure and draining vacuum (for benches not being filled) at the same time, with the same pump and venturi system. Therefore no plumbing was needed on the concrete floor or under the concrete floor.

There is a need, especially in retail areas, to at times relocate or even remove some of the plant display benches. With the system of the prior art, such removal results in exposed piping on the floor, such as fill lines and drain

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lines sticking out of the floor, when the benches are removed. This is completely unacceptable, especially for retail situations where customers constantly are present. The structure also denies flexibility in bench placement, as the fill and drain lines are permanently located. The new overhead system, as disclosed and claimed in the instant application, eliminates those problems, by locating the plumbing overhead, providing an integral vacuum system from the same pump, that replaces the drainage part of the cycle, which could be previously only be done with a gravity drain line under the benches. This new system also provides the needed flexibility in layout and removal of benches, since benches can now be removed, due to the flexible connection from above, and if needed, the bench can be removed completely by simply disconnecting the single fill/drain line. When the benches are removed, there are no remaining fill or drain lines on or protruding through the floor to become hazards to customers.

Also in the retail stores, there is no suitable area for the holding tank of recirculated water with the gravity drained system of the prior art as cited by the Examiner. With this particular system disclosed and claimed in the application, the holding tank is located remotely and above ground. The single pump and venturi system circulates the

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water and nutrient solution to the benches, thereby allowing water and nutrients to be taken up by the above the plants growing on the benches, and at the same time permitting the water to be drained or returned to the holding tank from an irrigated bench through one line. Thus, the device disclosed and claimed herein has multiplied the advantages of the prior system cited by the Examiner substantially and rendered the raising process or work much more efficient, environmentally safe, and environmentally helpful.

The single pump of the system disclosed and claimed in the captioned application, with circulation of water and nutrients through one line, allows the water and nutrients to be applied to desired benches and, at the same time drains the desired bench and takes that solution back to the holding tank from previously irrigated benches, especially due to valves used therewith.

5. I have found that the invention described in the above-captioned application has solved a major problem caused by the EBB FLO material cited by the Examiner, in that the system takes minimal space inside the growing buildings. The ease of assembly and disassembly of the apparatus permits a more flexible use of any building. The overhead water feeding combined with remote location of the water tank provides more growing space than usually obtained in my

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buildings. Adding water and removing through the same supply pipe provides efficient use of water. By feeding water to the rootball of the plant without water contacting leaves of the plants, the plants remain healthy and produce vegetables more efficiently.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Further declarant saith not.

Thomas Halat

Thomas Halat

Signed: THOMAS HALAT

MAR 17 2009

Mathew R. P. Perrone, Jr.

Attorney for Applicant

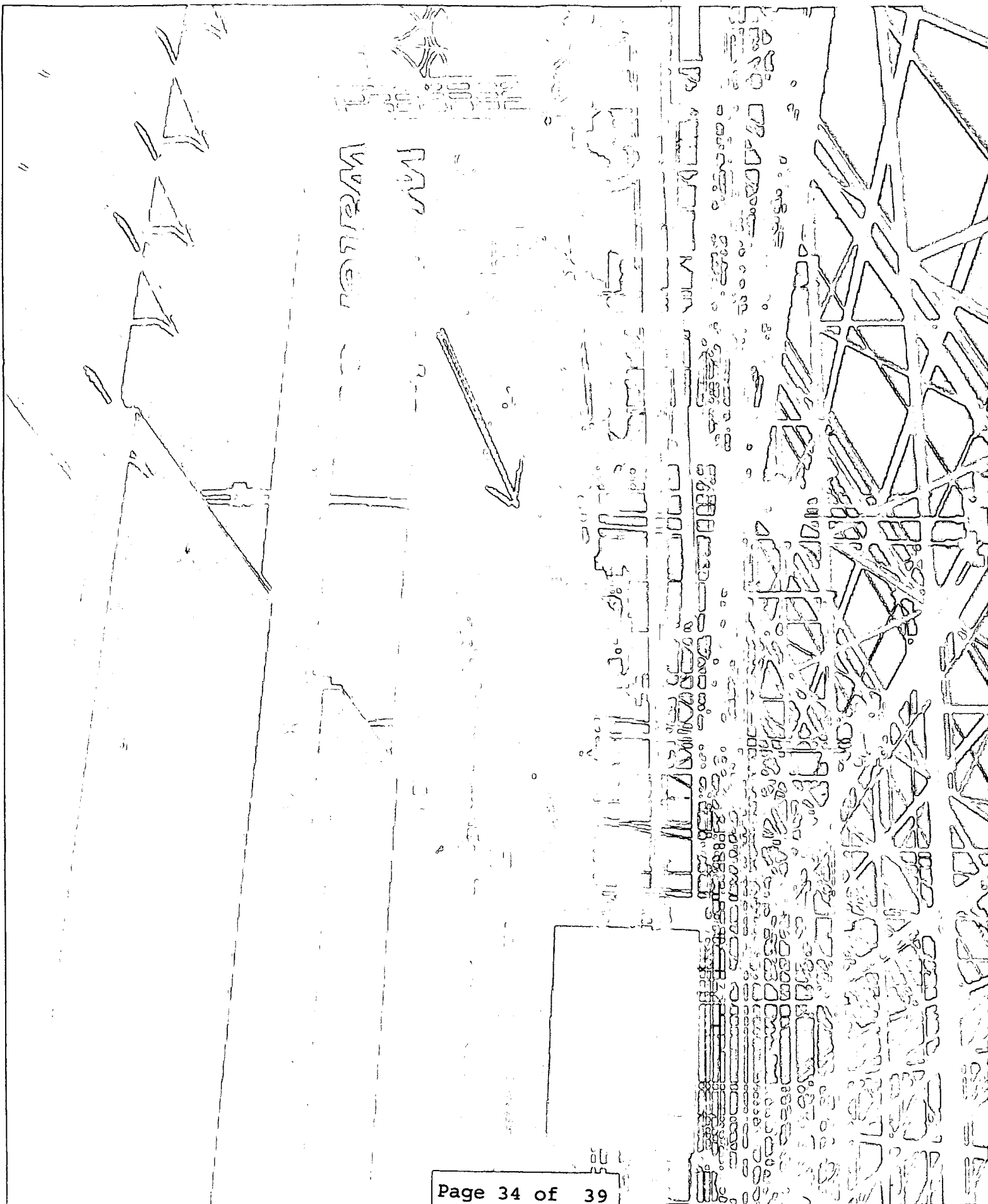
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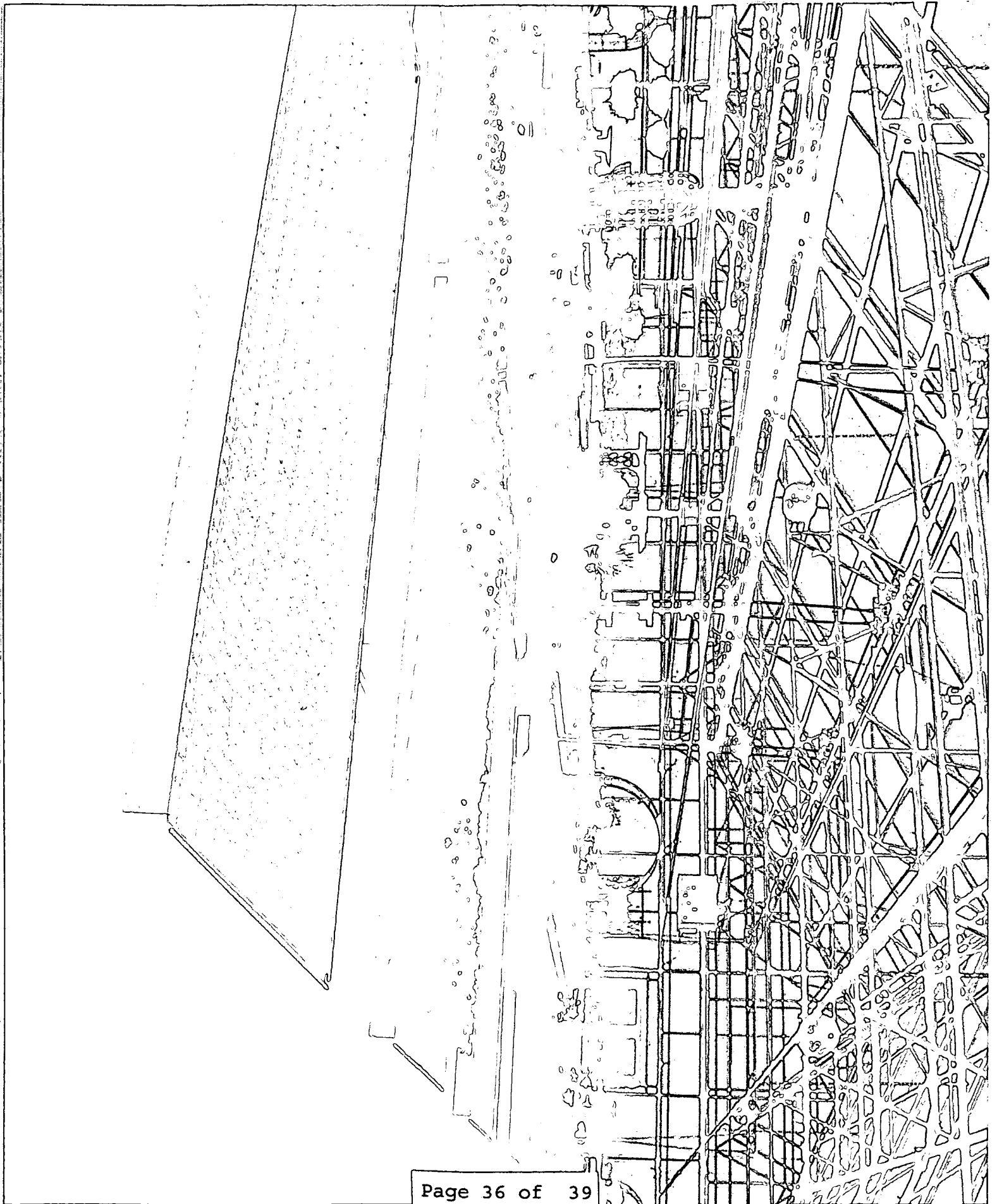
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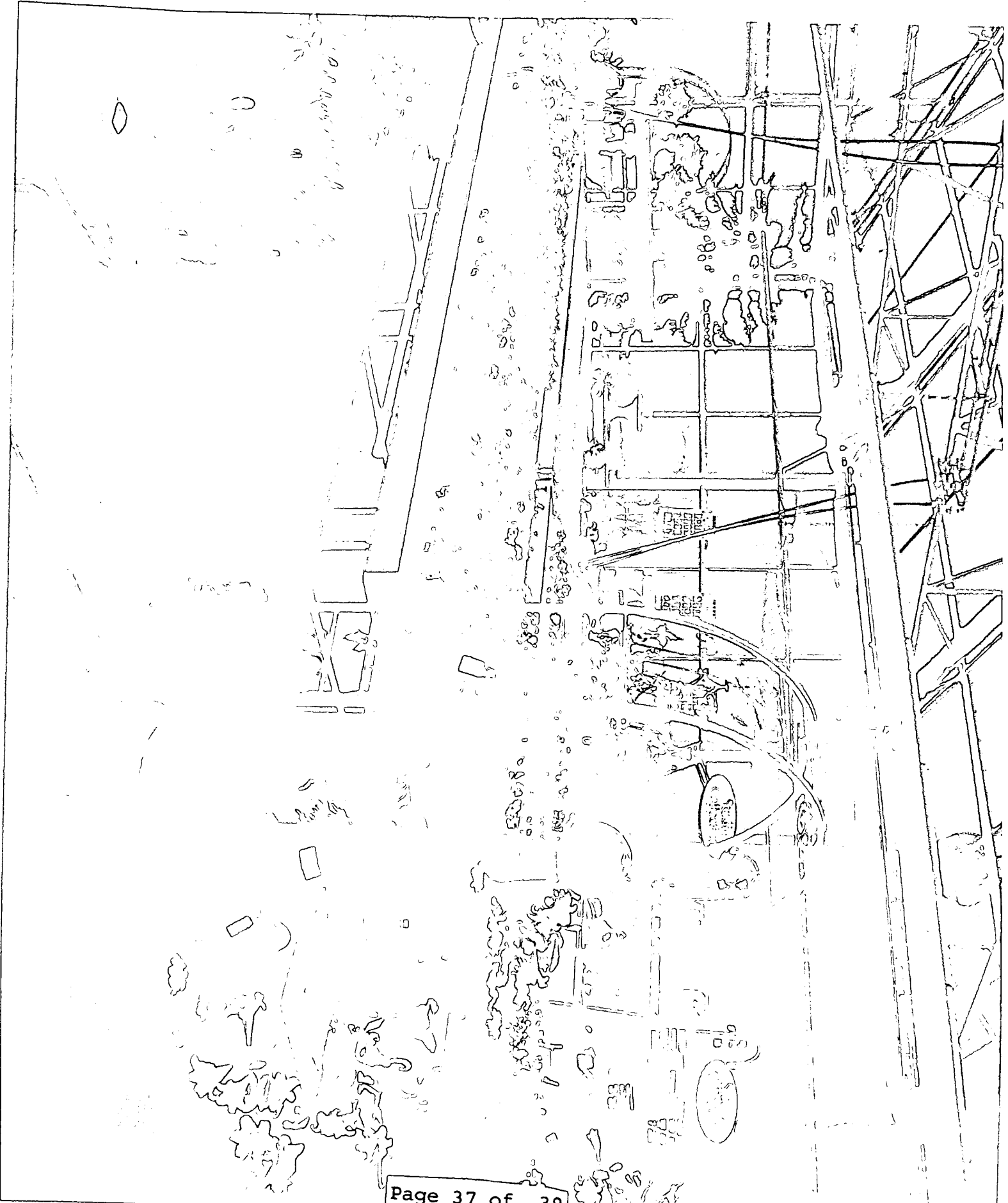
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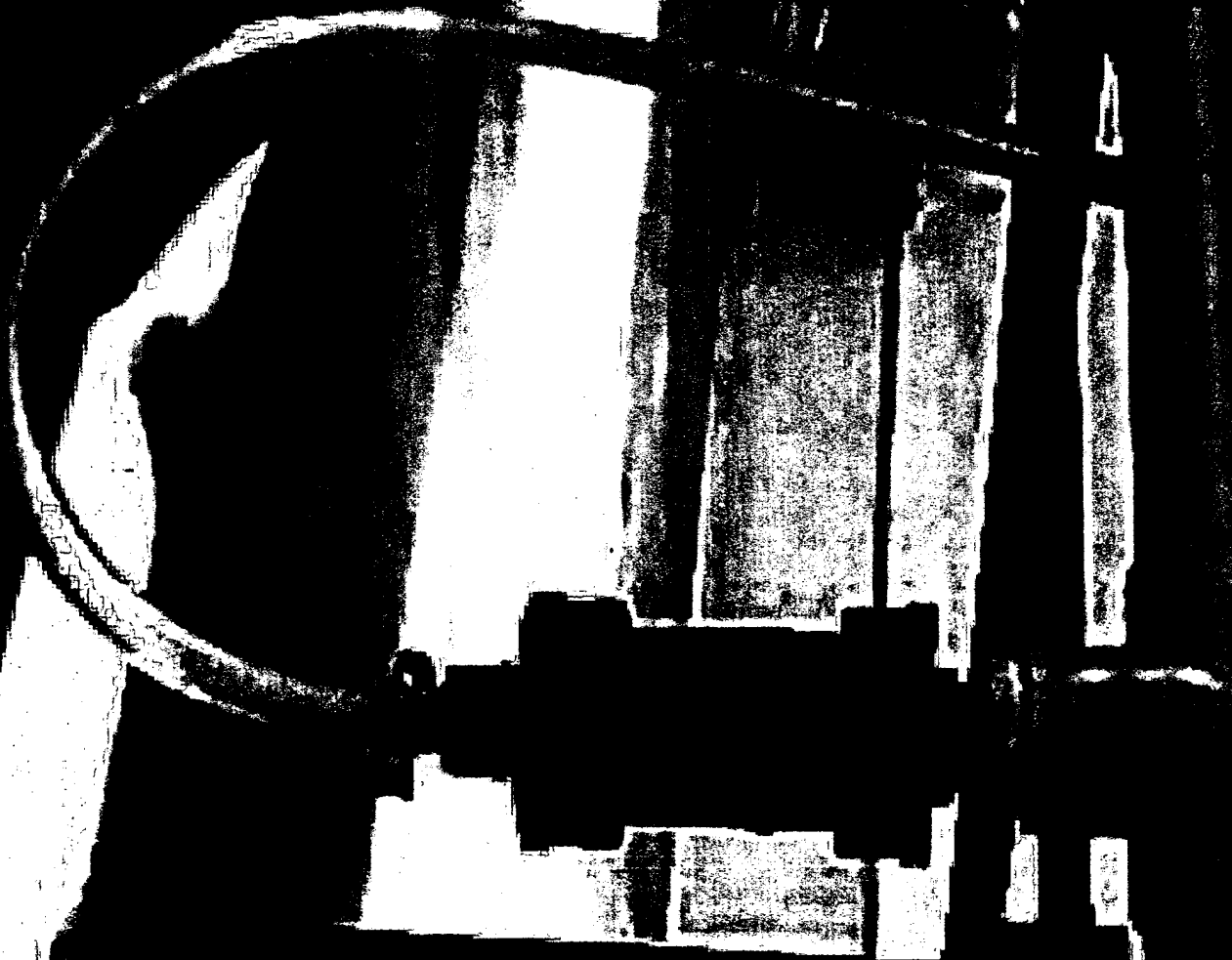
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